

# Computer Programming Languages

Below are three code segments (computer programs) written in three different programming languages (C++, Java & VB) that end with the same result. The program follows the following four steps:

- 1) The program declares a variable (storage area) named "Score"
- 2) The program assigns the value of "87" to the variable "Score".
- 3) The program compares the value in Score to the conditions of four "If" statements and prints either "Grade = C, Grade = B, Grade = A or Grade = Fail" depending on the value of Score.
- 4) The program ends.

## C++

```
int Score;
Score = 87;
if (Score >= 70 && Score <= 79)
    cout << " Grade = C ";
else if (Score >= 80 && Score <= 89)
    cout << " Grade = B ";
else if (Score >= 90)
    cout << " Grade = A ";
else
    cout << " Grade = Fail ";
```

*Output - Grade = B*

## Java

```
int Score;
Score = 87;
if(Score >= 70 && Score <= 79)
    System.out.print(" Grade = C ");
else if(Score >= 80 && Score <= 89)
    System.out.print(" Grade = B ");
else if(Score >= 90)
    System.out.print(" Grade = A ");
else
    System.out.print(" Grade = Fail ");
```

*Output - Grade = B*

## Visual Basic (VB)

```
Dim Score as integer
Score = 87
IF Score >= 70 AND Score <= 79 THEN
    txtOut.Text = " Grade = C "
ELSEIF Score > 80 AND Score <= 89 THEN
    txtOut.Text = " Grade = B "
ELSEIF Score > 90 THEN
    txtOut.Text = " Grade = A "
ELSE
    txtOut.Text = " Grade = Fail "
END IF
```

*Output - Grade = B*



**Activity:** Identify the differences and similarities in the syntax (rules) between the programming languages above?